

WHAT IS CLAIMED IS:

1. A data conversion system including a terminal device belonging to a first communication network, a server device belonging to a second communication network having a protocol different from that of said first communication network and a protocol conversion device provided at a connection point between said first communication network and said second communication network for conducting protocol conversion, comprising:

data conversion means for receiving constraint information peculiar to said terminal device added to a request from said terminal device for obtaining predetermined contents from said server device and converting predetermined contents obtained from said server device into data based on said constraint information.

2. The data conversion system as set forth in claim 1, wherein

said data conversion means determines whether predetermined contents obtained from said server device are image data or not and when said predetermined contents are image data, converts said predetermined contents into data based on said constraint information.

3. The data conversion system as set forth in claim 1, wherein

said data conversion means is provided at said protocol conversion device.

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4. The data conversion system as set forth in claim 1, further comprising

storage means for storing said constraint information from said terminal device, wherein

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said data conversion means converts predetermined contents obtained from said server device based on said constraint information stored in said storage means.

5. The data conversion system as set forth in claim 1, wherein

said protocol conversion device includes:

said data conversion means and

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storage means for storing said constraint information from said terminal device,

said data conversion means converting predetermined contents obtained from said server device based on said constraint information stored in said storage means.

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6. The data conversion system as set forth in claim 1, wherein

said data conversion means is provided at said

server device.

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7. The data conversion system as set forth in claim 1, wherein

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said protocol conversion device transmits said request received from said terminal device and said constraint information added to said request to said server device, and

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said server device includes storage means for storing said constraint information from said protocol conversion device and said data conversion means for converting said predetermined contents based on said constraint information stored in said storage means.

8. The data conversion system as set forth in claim 1, wherein

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said constraint information includes at least one of size information of images and gradation information of images.

9. The data conversion system as set forth in claim 1, wherein

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said first communication network is a communication network for portable information terminals and said second communication network is the Internet.

10. A data conversion method in a data conversion

system including a terminal device belonging to a first communication network, a server device belonging to a second communication network having a protocol different from that of said first communication network and a protocol conversion device provided at a connection point between said first communication network and said second communication network for conducting protocol conversion, comprising the steps of:

- 5 adding constraint information peculiar to said terminal device to a request from said terminal device for obtaining predetermined contents from said server device and transmitting the obtained request to said protocol conversion device, and
- 10 receiving said constraint information from said terminal device to convert predetermined contents obtained from said server device into data based on said constraint information.

11. The data conversion method as set forth in claim 10, wherein

- said data conversion step includes the steps of:
- determining whether predetermined contents
- 5 obtained from said server device are image data or not, and

 when said predetermined contents are image data, converting said predetermined contents into data based on said constraint information.

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12. The data conversion method as set forth in claim 10, wherein

said constraint information includes at least one of size information of images and gradation information of images.

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13. The data conversion method as set forth in claim 10, wherein

said first communication network is a communication network for portable information terminals and said second communication network is the Internet.

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14. A computer readable memory which stores a data conversion program for executing data conversion in a data conversion system including a terminal device belonging to a first communication network, a server device belonging to a second communication network having a protocol different from that of said first communication network and a protocol conversion device provided at a connection point between said first communication network and said second communication network for conducting protocol conversion,

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said data conversion program comprising the steps of:

adding constraint information peculiar to said terminal device to a request from said terminal device

15 for obtaining predetermined contents from said server
device and transmitting the obtained request to said
protocol conversion device, and
receiving said constraint information from said
terminal device to convert predetermined contents
20 obtained from said server device into data based on said
constraint information.

15. The computer readable memory which stores a data
conversion program as set forth in claim 14, wherein
said data conversion step of said data conversion
program includes the steps of:

5 determining whether predetermined contents
obtained from said server device are image data or not,
and

when said predetermined contents are image data,
converting said predetermined contents into data based
10 on said constraint information.

16. The computer readable memory which stores a data
conversion program as set forth in claim 14, wherein
said constraint information includes at least one
of size information of images and gradation information
5 of images.

17. The computer readable memory which stores a data
conversion program as set forth in claim 14, wherein

said first communication network is a
communication network for portable information terminals
5 and said second communication network is the Internet.

18. A data conversion system including a terminal
device belonging to a first communication network, a
server device belonging to a second communication
network having a protocol different from that of said
5 first communication network and a protocol conversion
device provided at a connection point between said first
communication network and said second communication
network for conducting protocol conversion, comprising:
data conversion unit which receives constraint
10 information peculiar to said terminal device added to a
request from said terminal device for obtaining
predetermined contents from said server device and
converts predetermined contents obtained from said
server device into data based on said constraint
15 information.

19. The data conversion system as set forth in claim
18, wherein
said data conversion unit determines
whether predetermined contents obtained from said
5 server device are image data or not and when said
predetermined contents are image data, converts said
predetermined contents into data based on said

constraint information.

20. The data conversion system as set forth in claim 18, wherein

said data conversion unit is provided at said protocol conversion device.

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21. The data conversion system as set forth in claim 18, further comprising

storage unit which stores said constraint information from said terminal device, wherein

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said data conversion unit converts predetermined contents obtained from said server device based on said constraint information stored in said storage unit.

22. The data conversion system as set forth in claim 18, wherein

said protocol conversion device includes:

said data conversion unit and

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storage unit which stores said constraint information from said terminal device,

said data conversion unit converting predetermined contents obtained from said server device based on said constraint information stored in said storage unit.

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23. The data conversion system as set forth in claim

18, wherein

5 said protocol conversion device transmits said
request received from said terminal device and said
constraint information added to said request to said
server device, and

10 said server device includes storage unit which
stores said constraint information from said protocol
conversion device and said data conversion unit which
converts said predetermined contents based on said
constraint information stored in said storage unit.

24. The data conversion system as set forth in claim
18, wherein

5 said constraint information includes at least one
of size information of images and gradation information
of images.

25. The data conversion system as set forth in claim
18, wherein

5 said first communication network is a
communication network for portable information terminals
and said second communication network is the Internet.